Appendix J - Required Elements for Watershed-Based Plans as per CWA Section 319

To ensure that Section 319 projects make progress towards restoring waters impaired by nonpoint source pollution, U.S. EPA is requiring that all projects implemented with Section 319 funds must be consistent with watershed-based plans that include at least the elements listed below. U.S. EPA also requires that Section 319 funded projects implement activities to reduce pollutant loads consistent with an existing TMDL or a TMDL under development.

U.S. EPA believes that the nine required elements outlined below are critical to assure that public funds to address nonpoint source water pollution are used effectively. The watershed planning process is dynamic and iterative, and projects whose plans address each of these nine elements may proceed even though some of the information in the plan is imperfect and may need to be modified over time as information improves.

In California, a wide range of plans are being used to comply with the nine required elements, often in combination with each other. Examples of plans that are being used to in California include local watershed plans, coordinated resource management plans, TMDL implementation plans, comprehensive conservation and management plans, RWQCB's Water Quality Control Plans (Basin Plans), and the RWQCB WMI Chapters under the WMI Integrated Plan, and combinations thereof. Applicants should work with the RWQCBs to verify that the combination of plans have the nine elements. Those elements that are not included in existing plans will need to be incorporated into the plans, as appropriate, to be eligible for Section 319 funds.

The required watershed-based plan elements are as follows:

a. An identification of the causes and sources or groups of similar sources that will need to be controlled to achieve the load reductions estimated in this watershed-based plan.

b. An estimate of the load reductions expected for the management measures described under paragraph (c) below.

c. A description of the NPS management measures that will need to be implemented to achieve the load reductions estimated under paragraph (b) above and an identification (using a map or a description) of the critical areas in which those measures will be needed to implement this plan.

d. An estimate of the amounts of technical and financial assistance needed, associated costs, and/or the sources and authorities that will be relied upon, to implement this plan.

e. An information/education component that will be used to enhance public understanding of the project and encourage their early and continued participation in selecting, designing, and implementing the NPS management measures that will be implemented.

f. A schedule for implementing the NPS management measures identified in this plan that is reasonably expeditious.

g. A description of interim, measurable milestones for determining whether NPS management measures or other control actions are being implemented.

h. A set of criteria that can be used to determine whether loading reductions are being achieved over time and substantial progress is being made toward attaining water quality standards and, if not, the criteria for determining whether this watershed-based plan needs to be revised or, if a NPS TMDL has been established, whether the NPS TMDL needs to be revised.

i. A monitoring component to evaluate the effectiveness of the implementation efforts over time, measured against the criteria established under item (h) immediately above.

You may also refer to the full text of the Section 319 guidelines that is available on U. S. EPA's NPS website at: http://www.epa.gov/fedrgstr/EPA-WATER/2003/October/Day-23/w26755.htm

Table I - 2. Nonpoint Source Pollution Control Short Term Objectives

Objective	Goal that the Objective Fulfills	2002	2003	2004	2005	2006	Management Measures	Funded in FY 2003/2004 ?
Achieve Alamo River Sediment TMDL Implementation milestones	Goals 1 & 3	X	X	X	X	X	1A, 1F, 1G	
Achieve New River Sediment TMDL Implementation milestones	Goals 1 & 3		X	X	X	X	1A, 1F, 1G	
Achieve Imperial Valley Drains Sediment TMDL Implementation milestones	Goals 1 & 3			X	X	X	1A, 1F, 1G	
Achieve New River Pathogens TMDL Implementation milestones	Goal 2	X	X	X	X	X		
Develop Salton Sea Nutrients TMDL Implementation Plan	Goals 3 & 4	X	X	X				
Implement Salton Sea Nutrients TMDL	Goals 1, 3 & 4				X	X	1C, 1F, 1G	
Develop Selenium TMDL Implementation Plan	Goals 3 & 4				X	X		
Develop pesticides TMDLs Implementation Plan	Goals 3 & 4					X		
Conduct comprehensive water quality monitoring, assessment, and reporting	Goals 3 & 6	X	X	X	X	X		
Determine the quantitative performance of sediment control management measures	Goals 1, 3, & 6	X	X	X	X	X		
Tracking and oversight of implementation of the Tier 1 Imperial Co. Farm Bureau Watershed Program	Goals 1, 3, 4, & 6	X	X	X	X	X	1A, 1C, 1D, 1F, 1G	
Provide financial and technical assistance for the development of demonstrations of BMPs	Goals 1, 3, 4, 6 & 7	X	X	X	X	X	1A, 1C, 1D, 1F, 1G	

Objective	Goal that the Objective Fulfills	2002	2003	2004	2005	2006	Management Measures	Funded in FY 2002/2003?
Provide financial and tech. assistance for the development of watershed plans	Goals 1, 3, 4, & 7	X	X	X	X	X	1A, 1C, 1D, 1F, 1G	
Develop and implement an effective regulatory, educational, and assistance structure to address pollution from septic systems	Goals 1, 4, 5 & 7	X	X	X	X	X	3, 4 B	
Develop comprehensive ground water maps of drinking water aquifers and potential sources of pollution and assess data gaps	Goals 1 & 5	X	X	X				

Table I – 3. Education, Outreach, AND Technical Assistance

Target Audience	Education/Outreach/ Assistance Goals	Product(s)	Staff or Contract	Management Measure Category
Salton Sea Nutrients TMDL Technical Advisory Committee (TAC)	- Provide RB staff with technical assistance on TMDL Implementation	- Monthly meetings - Formal TAC recommendations	Staff	Agriculture 1A, 1F, 1G
Imperial County Farm Bureau	- Effective implementation of the Farm Bureau NPS Initiative to attain measurable water quality improvement	- Coordination with the Farm Bureau Watershed Coordinator - Regular tracking reports - Verification of tracking reports - Coordination with each of 10 “drainshed” groups established as part of the Farm Bureau Plan	Staff/ Contract	Agriculture
Imperial and Coachella Valleys Growers and Irrigators	- TMDL implementation requirements - Sediment and nutrients control BMPs	- Grower-targeted video - Irrigator-targeted video, handbook, and technical assistance software and public forums on BMPs - Demonstration project using irrigation strategies aimed at reducing polluted runoff water	Contract	Agriculture 1A, 1C, 1G
Citizens Congressional Task Force for the New River	- Volunteer monitoring	- Volunteer monitoring kits and guidebooks for local high schools	Contract	Wetlands 6C, 6D
Nationwide	- Provide information about New River problems/issues	- 1-hour informational documentary to be aired on PBS about the New River	Contract	Agriculture 1G

Target Audience	Education/Outreach/ Assistance Goals	Product(s)	Staff or Contract	Management Measure Category
Web-savvy public	- Provide up-to-date information on NPS issues, TMDLs, water quality reports	- Regularly updated webpage	Staff	

Table I – 4. Waivers of Waste Discharge

Waiver No./Name/Description	Management Measures	Review Schedule
93-004/Minor Dredging Operations/where soil is non-toxic and discharged to land	Hydromodification	January 2008

Table I – 5. Key Partners

Existing or Potential Partner Agency:	MOU/MAA Title Content of potential/revised agreements:	Target date for review (existing) or adoption (potential):	Management Measure Categories:
U.S. Bureau of Land Management	MOU between U.S. BLM and RWQCB 7	No review necessary	5.1B, 5.3A, 5.4A, 6A, 6B, 6D
Imperial Irrigation District	Sediment Control Water Quality Monitoring	December 2002	1A, 1C, 1D
Natural Resources Conservation Service (NRCS)	Shared priorities and goals	State Board is working on MOU	1A, 1B, 1C, 1E, 1F, 1G
Imperial County Farm Bureau	Commitment to implement Watershed Program	December 2002	1A, 1C, 1D, 1F, 1G

Table I – 6. Targeted EQIP Projects

Project Description	Geographic Location	Management Measures
Erosion Control Projects	Salton Sea Transboundary Watershed	Agriculture
Erosion and nutrient management education/outreach projects	Salton Sea Transboundary Watershed	Agriculture
Nutrient management projects	Salton Sea Transboundary Watershed	Agriculture

Table I – 7. Proposed SFY 2002/03 Resource Allocation

Task	Product	Management Measure(s)	Geographic Area	Funding Source	Cost PYs/Dollars
1. Alamo and New Rivers and Imperial Valley Ag. Drains Sediment TMDL Implementation Planning and Monitoring	- Monthly monitoring at strategic stations in the Alamo and New Rivers and Imperial Valley Ag. Drains - Quarterly data reports - Year-end data report	1A, 1G, 1F	Salton Sea Transboundary Watershed	State	1.0 PY
2. Lab analysis services for Alamo and New Rivers and Imperial Valley Ag. Drains Sediment TMDLs	- Lab analysis		Salton Sea Transboundary Watershed	State	$100,000 (0.8 PY)
3. Alamo River Sediment TMDL Implementation	- Coordination with Imperial County Farm Bureau to implement NPS Watershed Program - Regular tracking reports - Technical assistance to local “drainshed” groups in the formation of their plans - Tracking of management measure implementation	1A, 1G, 1F	Salton Sea Transboundary Watershed	Fed 319 (h)	0.7 PY

Task	Product	Management Measure(s)	Geographic Area	Funding Source	Cost PYs/Dollars
4. New River Pathogens TMDL Implementation Planning and Monitoring	- Coordination with NPDES program to address point source facilities in the region - Modified NPDES permits if needed		Salton Sea Transboundary Watershed	State	0.2 PY
5. Salton Sea Nutrients TMDL Implementation Planning and Monitoring	- Stakeholder groups, research on nutrient control technology, year-end report - Field monitoring activities	1C, 1F, 1G	Salton Sea Transboundary Watershed	State Fed 319 (h)	0.4 PY 0.3 PY
6. Palo Verde Outfall Drain Pathogen TMDL Monitoring	- Field activities and lab services		Lower Colorado River Watershed	State	$100,000 (0.8 PY)
7. NPS Program Management	- Participation in the NPS Roundtables, Conferences, and Workshops - Review of NPS Program documents	1A, 1C, 1D, 1F, 1G	Regionwide	Fed 319 (h) State	0.5 PY 0.5 PY
8. Fed 319 (h) and State Prop 13 Grant Solicitation	- Technical assistance and stakeholder outreach for completion of 319 (h) and Prop 13 Proposals	1A, 1C, 1D, 1F, 1G	Regionwide	Fed 319 (h) State	0.2 PY 0.2 PY

Task	Product	Management Measure(s)	Geographic Area	Funding Source	Cost PYs/Dollars
9. Fed 319 (h) and State Prop 13 Contract management	- Contract management of contracts awarded to contractors in the region	1A, 1C, 1D, 1F, 1G	Regionwide	Fed 319 (h) State	0.6 PY 0.2 PY
10. Public Education and Outreach to Promote TMDL Implementation	- Speak at stakeholder forums - Prepare outreach newsletters, bulletins about TMDL Implementation - Attend stakeholder conventions/meetings	1G	Regionwide	State	0.3 PY

TOTAL STAFF COST = 6.7 PY = $837,500

Table I – 8. NPS Resource Need 2002/03 Through 2004/2005

Task	Product	Management Measure(s)	Geographic Area	State Fiscal Year	Est. Cost PYs/Dollars
1. Alamo and New Rivers and Imperial Valley Ag. Drains Sediment TMDL Implementation Planning and Monitoring	- Monthly monitoring at strategic stations in the Alamo and New Rivers and Imperial Valley Ag. Drains - Quarterly data reports - Year-end data report	1A, 1G, 1f	Salton Sea Transboundary Watershed	2002/03 2003/04 2004/05	1.0 PY 0.5 PY 0.5 PY
2. Lab analysis services for Alamo and New Rivers and Imperial Valley Ag. Drains Sediment TMDLs	- Lab analysis		Salton Sea Transboundary Watershed	2002/03 2003/04 2004/05	$100,000 (0.8 PY) $50,000 (0.4 PY) $50,000 (0.4 PY)
3. Alamo River Sediment TMDL Implementation	- Coordination with Imperial County Farm Bureau to implement NPS Watershed Program - Regular tracking reports - Technical assistance to local "drainshed" groups in the formation of their plans - Tracking of management measure implementation	1A, 1G, 1F	Salton Sea Transboundary Watershed	2002/03 2003/04 2004/05	0.7 PY 0.7 PY 0.7 PY

Task	Product	Management Measure(s)	Geographic Area	State Fiscal Year	Est. Cost PYs/Dollars
4. New River Pathogens TMDL Implementation Planning and Monitoring	- Coordination with NPDES program to address point source facilities in the region - Modified NPDES permits if needed		Salton Sea Transboundary Watershed	2002/03 2003/04 2004/05	0.2 PY 0.2 PY 0.2 PY
5. Salton Sea Nutrients TMDL Implementation Planning and Monitoring	- Stakeholder groups, research on nutrient control technology, year-end report - Field monitoring activities	1C, 1F, 1G	Salton Sea Transboundary Watershed	2002/03 2003/04 2004/05	0.7 PY 0.7 PY 0.7 PY
6. Palo Verde Outfall Drain Pathogen TMDL Monitoring	- Field activities and lab services		Lower Colorado River Watershed	2002/03 2003/04 2004/05	$100,000 $100,000 $100,000
7. NPS Program Management	- Participation in the NPS Roundtables, Conferences, and Workshops - Review of NPS Program documents	1A, 1C, 1D, 1F, 1G	Regionwide	2002/03 2003/04 2004/05	1.0 PY 1.0 PY 1.0 PY

Task	Product	Management Measure(s)	Geographic Area	State Fiscal Year	Est. Cost PYs/Dollars
8. Fed 319 (h) and State Prop 13 Grant Solicitation	- Technical assistance and stakeholder outreach for completion of 319 (h) and Prop 13 Proposals	1A, 1C, 1D, 1F, 1G	Regionwide	2002/03 2003/04 2004/05	0.4 PY 0.4 PY 0.4 PY
9. Fed 319 (h) and State Prop 13 Contract management	- Contract management of contracts awarded to contractors in the region	1A, 1C, 1D, 1F, 1G	Regionwide	2002/03 2003/04 2004/05	 0.8 PY 0.8 PY 0.8 PY
10. Public Education and Outreach to Promote TMDL Implementation	- Speak at stakeholder forums - Prepare outreach newsletters, bulletins about TMDL Implementation - Attend stakeholder conventions/meetings	1G	Regionwide	2002/03 2003/04 2004/05	0.3 PY 0.3 PY 0.3 PY

TOTAL STAFF COST = 17.5 PY = $2,187,500

Table I – 9. Project/Needs/Activity Type and Description

Project/Needs/Activity Type and Description	Watersheds						
	Salton Sea Transboundary Watershed	Imperial Hydrologic Unit	New River	Whitewater Hydrologic Unit	High Desert Groundwater Basins	Palo Verde Outfall Drain	Region-wide
Implement BMPs/Improve Water Quality							
TMDL Implementation							A
Implement Agricultural Sedimentation/Erosion control Projects—could include projects that reduce inputs of sediments to receiving waters or that treat surface waters for pollutant	A						
Implement Nutrients Control Projects—could include projects that reduce inputs of nutrients to receiving waters or that treat surface waters for pollutant	A						
Implement Pesticides Control Projects—could include projects that reduce inputs of pesticides to receiving waters or that treat surface waters for pollutant	A		A				
Implement Wetlands Demonstration Projects—should focus on treatment of polluted agricultural drain water and/or New River water	A		A				
Implement Selenium Control Projects—could include projects that reduce inputs of Selenium to receiving waters or that treat surface waters for pollutant	B						
Groundwater Pollution Abatement Projects—projects that aim to protect groundwater aquifers and/or aim to remediate existing groundwater polltion	A			A	A		
Implement New River Dissolved Oxygen (DO) Improvement Projects—manmade structures to improve DO levels in the New River	B	B	B				
Implement New River Volatile Organic Compounds Control Projects	B	B	B				
Urban Nutrients Management	A						
Drain Erosion Control Projects	A	A	A				
Reduce Polluted Runoff from Animal Feeding Operations	B					A	
Habitat Restoration/Beneficial Use Enhancement							
Wildlife Habitat Restoration	A						

Project/Needs/Activity Type and Description		Watersheds						
		Salton Sea Transboundary Watershed	Imperial Hydrologic Unit	New River	Whitewater Hydrologic Unit	High Desert Groundwater Basins	Palo Verde Outfall Drain	Region-wide
Wetlands Restoration and Preservation (cleanup, buffer zones, purchases, management practices)		A		B				
Assess Loadings and Impacts								
Evaluate External and Internal Nutrients Loadings into the Salton Sea		A						
Evaluate Impacts of Irrigation Management Practices on Water Quality		A						
Investigate Eutrophication in the Salton Sea		A						
Research-Oriented Studies								
Evaluate which Management Practices are Most Effective for Irrigated Agriculture		A						
Evaluate the Effectiveness of Irrigated Agricultural Management Practices		A		A				
Monitoring								
Implement Citizens Monitoring		C		C				
Implement Pesticides Monitoring		B		B				
Implement Toxic Substances Monitoring		C		B				
Education and Outreach								
Farm Water Quality Planning Courses/Software—should include components that focus on current and future TMDL water quality issues		A	A					
Irrigator Training—should include components that focus on sediment water quality issues		A	A	A				
Implementation Education and Stakeholder Involvement—should include on-the-ground encouragement/coordination of discharger/landowner NPS implementation with reporting		A	A	A				
Education and Outreach								
Erosion and Nutrients Management Education Projects		A	A	A				
Watershed Planning								
GIS TMDL Implementation Tracking System		A	A			A	A	
Land Acquisition								
Increase Wetlands Acreage		B	B	B				